INCH-POUND

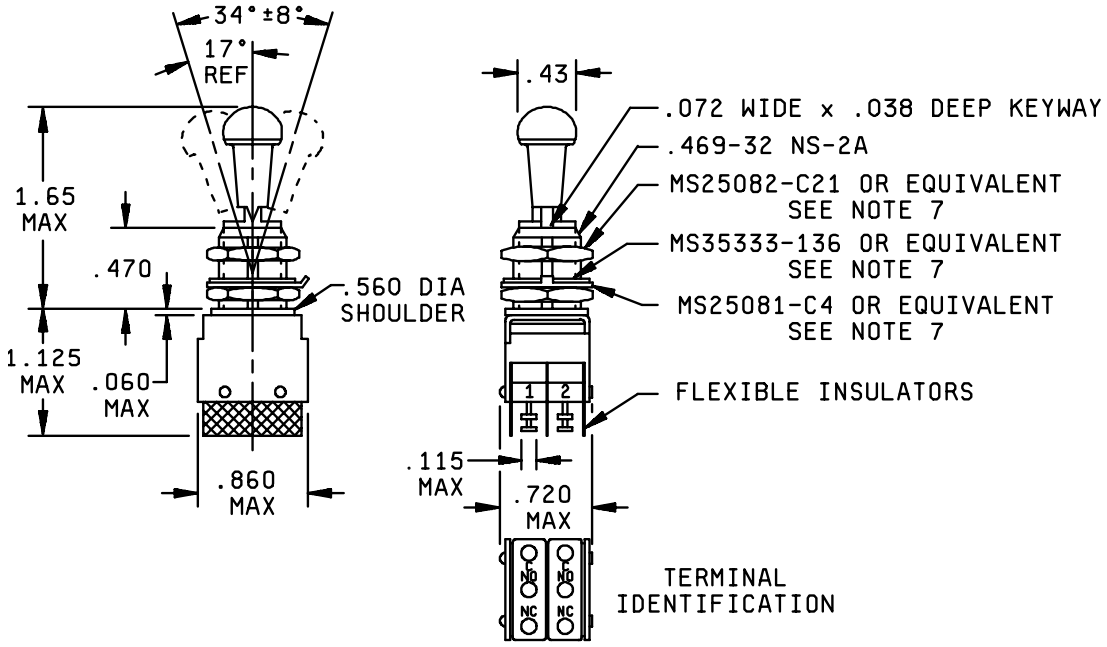
MIL-PRF-8805/92C
31 October 2001
SUPERSEDING
MIL-PRF-8805/92C
28 June 1988

PERFORMANCE SPECIFICATION SHEET

SWITCH ASSEMBLIES, SENSITIVE, LEVER LOCK, 5 AMPERES, UNSEALED

This specification forms a part of MIL-PRF-8805, dated 23 January 1998, and is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-8805.



CONFIGURATION 1

FIGURE 1. Configurations and dimensions.

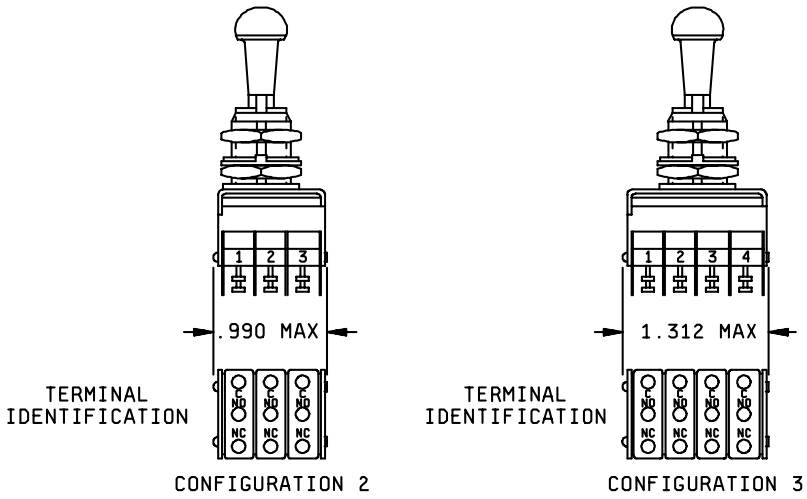


FIGURE 1. Configurations and dimensions - continued.

Inches	mm	Inches	mm	Inches	mm
.038	.97	.43	10.92	.860	21.84
.060	1.52	.469	11.91	.990	25.15
.062	1.57	.470	11.94	1.125	28.58
.072	1.83	.560	14.22	1.312	33.32
.115	2.92	.720	18.29	1.65	41.91

NOTES:
1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based on 1 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are ±.015 (.38 mm) for three place decimals and ±.02 (51 mm) for two place decimals.
4. Design configuration optional provided specified dimensions are not exceeded.
5. Base switch number shall be permanently marked as shown.
6. Double turret type terminals shall accept two AN-20 or equivalent wires.
7. Alternative base metals and protective finishes, as approved by the qualifying activity, may be utilized for hexagon nut, lock washer and key washer material. Dimensions shall be in accordance with the referenced hardware specifications.

FIGURE 1. Configurations and dimensions - continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Enclosure design: 1 (Unsealed).

Temperature characteristic: 1 (-55°C to +85°C).

Shock type: M (100 g, test condition I, method 213 of MIL-STD-202).

Vibration grade: 1 (10 to 500 Hz).

Weight: See table III.

Operating characteristics:

Coincidence of operating and releasing points: All poles shall transfer within 10°.of lever travel.

Locking arrangement: Positive locking shall be accomplished and shall prevent motion of the toggle lever until the locking mechanism is manually released.

Locking mechanism release: The force required to release the locking mechanism shall be 3 to 5 pounds.

Material:

Bracket and lever: Corrosion resistant steel.

Switch assembly: Basic switch shall be MS25085-2 (MIL-PRF-8805/2) switch listed on QPL-8805.

Contact resistance: Not applicable.

Dielectric withstanding voltage:

Sea level: 1,000 Vrms.
Altitude: 50,000 feet, 400 Vrms

In qualification inspection table after electrical endurance the dielectric withstanding voltage points of application between all unconnected terminals of the same pole is not applicable.

Mechanical endurance: 100,000 cycles.

Lever lock switches shall be tested for 100,000 cycles (at room ambient conditions) with the lever being pulled to its fully extended position and then permitted to return to its fully retracted position by spring action without operation of the switches. The cycling rate for this test shall be 60 cycles per minute maximum. In addition to this test, the lever lock switches shall receive a normal mechanical endurance test of 100,000 cycles of operation with the lever lock mechanism held in its fully extended position continuously throughout the test.

Electrical endurance: 25,000 cycles.

Electrical ratings: See table I.

Qualification inspection (group submission): See table II.

Part or Identifying Number (PIN): See table III

Circuit configuration: See table IV.

TABLE I. Electrical ratings.

Load	Sea level		50,000 feet
	28 V dc	115 V ac, 60 Hz	28 V dc
	amperes	amperes	amperes
Resistive	5	5	5
Inductive	3	5	2.5
Lamp	2.4	1.5	2.4

TABLE II. Qualification inspection group submission.

Examination or test	Basic switch assembly	Additional sample units for combined submission	Extent of approval
Group I. Visual and mechanical examination Operating characteristics	M8805/92-002 (12 sample units)	(2 sample units each) M8805/92-005 M8805/92-016 M8805/92-019 (tested to group I only)	All
Group II. Strength of actuating means (2 sample units only) Strength of mounting bushing (2 sample units only) Thermal shock Vibration Shock Operating characteristics Dielectric withstanding voltage Visual and mechanical examination	(4 sample units from group I)	- - - - -	
Group III. Salt spray (corrosion) Visual and mechanical examination	(2 sample units from group I)	- - - -	
Group IV. Low temperature operation (2 sample units) Mechanical endurance at room ambient conditions (2 units) Operating characteristics Dielectric withstanding voltage Visual and mechanical examination	(4 sample units from group I)	- - - -	
Group V. Electrical endurance Inductive load, dc	(2 sample units from group I)	- - - -	

TABLE III. PIN's and characteristics.

PIN M8805/92-	Switch configuration number (See figure I)	Locking combination	Table IV circuit configuration	Switch action			Weight
				Opposite keyway	Center	Keyway	
001	1	D	1	Main	None	Main	lb. max .075
002	3	D	4				.100
003		F					.100
004		G					.100
005	1	E	2	Mom	Main	Mom	.075
006		A		Main	Main	Main	.075
007		D					.075
008		E					.075
009		F					.075
010		G					.075
011		J					.075
012		K					.075
013		L					.075
014		M					.075
015		N					.075
016		B		Mom	Main	Main	.075
017		E					.075
018		P					.075
019	2	A	3	Main	Main	Main	.090

TABLE IV. Circuit configuration.

Circuit configuration	Switch pole number	Circuit closed with the toggle lever in		
		Opposite keyway side	Center	Keyway side
1	1	C-NC	None	C-NO
	2	C-NC		C-NO
2	1	C-NO	C-NC	C-NC
	2	C-NC	C-NC	C-NO
3	1	C-NO	C-NC	C-NC
	2	C-NC	C-NC	C-NO
	3	C-NO	C-NC	C-NC
4	1	C-NC	None	C-NO
	2	C-NC		C-NO
	3	C-NC		C-NO
	4	C-NC		C-NO

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5930-1126-23)

Review activities:
Army – AR, AV, MI
Navy – AS, MC, OS
Air Force – 19